

REMARKS

By this amendment, Applicants have amended the specification to insert appropriate headings therein, as suggested by the Examiner in numbered section 1 of the Office Action. Applicants have also amended page 1, line 19 and page 3, line 27 of the specification to correct a translation error, i.e., to correct “inserted” to read --pushed--. This amendment corrects a mistranslation of the German word “eingeschoben” in the original international application and, therefore, is supported by the original international application, as well as by page 2, line 29 to page 3, line 3; page 4, lines 34-37, page 5, lines 6-11 and page 5, lines 35-37 of the English translation.

Applicants have also amended the claims to more clearly define their invention. In particular, the claims have been amended to delete the reference numerals therefrom and claim 1 amended to recite that the projectile is mounted onto the plunger so that before firing the plunger is not wedged into the free space and the plunger is pushed into the free space and wedged in the free space in the course of firing. See, e.g., Figures 1-3 and the description thereof in Applicants’ specification. Claim 10 has been amended to eliminate the indefiniteness problem noted by the Examiner in numbered section 3 of the Office Action, and claim 13 added to recite a limitation similar to the limitation deleted from claim 10.

In view of the foregoing amendment to claim 10, it is submitted that claim 10 complies with the requirements of 35 U.S.C. 112, second paragraph. Therefore, reconsideration and withdrawal of the rejection of claim 10 under 35 U.S.C. 112, second paragraph, are requested.

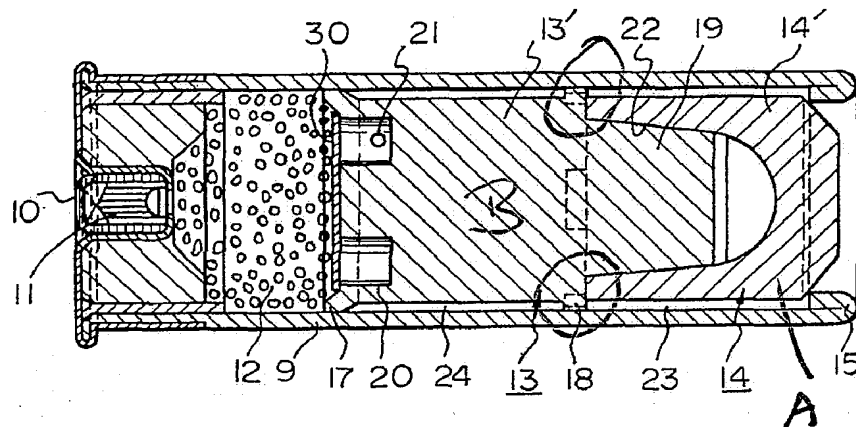
Claims 1-3 and 9-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,587,905 to Maki in view of U.S. Patent No. 3,058,420 to Tanner et al. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to a shotgun-barrel projectile. As shown, by way of example only in Figure 1, the projectile 1 includes an intercalation 2 for fitting into a cartridge 20. The projectile 1 exhibits a cylindrical free space 10 on its underside, and the intercalation 2 takes the form of a plunger 21 at its end facing towards the projectile 1, the plunger 21 having a diameter adapted the free space 10. The projectile 1 is mounted onto the plunger 21 or conversely (i.e., the plunger 21 mounted on the projectile 1) so that before firing the plunger 21 is not wedged in the free space 10. See, e.g., Figure 1. In the course of firing, however, the plunger 21 is pushed into the free space 10 and wedged in the free space. See, e.g., Figures 2 and 3.

The Maki patent discloses an assembly of a wad and a slug for a shotgun cartridge, the wad and slug being coaxially connected to each other by way of male and female connectors provided on the wad and the slug without play between the connectors, the assembly comprising peripheral projections spaced from one another in the axial direction of the assembly.

As admitted by the Examiner in numbered section 5 of the Office Action, the Maki patent does not disclose the presently claimed invention including a plunger which is pushed into a free space of a projectile and wedged in the free space in the course of firing. In fact, this is not even possible in Maki, because, in Maki, the projectile A sits on the plunger B as

shown in the following sketch.



The Tanner et al. patent discloses a slug-loaded shotgun cartridge comprising, in combination, a casing closed at one end to form a breech closure, a propellant charge within the casing and rifled slug having a base cavity. A solid support of density below that of the slug is provided substantially contiguous with the base of the slug and the surface of the cavity therein. As shown in the figures of Tanner et al., the support 8 is provided in the metal slug 7, even before firing. The Office Action apparently reproduces Figure 6 of Tanner et al. in which the support 8d is provided within the slug 7 before firing and has a thin walled tubular mantle 13 provided outside the slug.

In Tanner et al., the support 8 is not pushed into any free space in the slug 7 and wedged there in the course of firing since the support 8 is already located within the slug 7 even before firing.

Thus, neither Maki nor Tanner et al. disclose a plunger of an intercalation that is pushed into a free space of a projectile and wedged in the free space in the course of firing.

Accordingly, the presently claimed invention is neither disclosed by Maki nor Tanner et al. nor obvious over the combination thereof.

Claims 4-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Maki in view of Tanner et al. and further in view of U.S. Patent No. 4,109,582 to Haep et al. Applicants traverse this rejection and request reconsideration thereof.

The Examiner has cited the Haep et al. patent as allegedly teaching a ring connected to the outer periphery of a projectile acting as both a stop and projectile stabilizer. However, clearly nothing in Haep et al. would have remedied the basic deficiencies noted above with respect to Maki and Tanner et al. Accordingly, claims 4-8 are patentable over the proposed combination of references, at least for the reasons noted above.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

Please charge any shortage in the fees due in connection with the filing of this paper, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 612.46102X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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